PATENT
Expedited Procedure
After Final Response
Brief Under 37 CFR 1.192

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant:	MARTINEZ	)	Examiner R. Osorio
Appl. No.	10/084,965	)	Art Unit 2673
Confirm. No.	2203	)	
Filed:	28 February 2002	)	Atty. Docket No. CS10862

Title: "Cellular Communications Handsets Having Variable Appearance Housings And Methods Therefor"

BRIEF UNDER 37 C.F.R. § 1.192

Assistant Commissioner for Patents
Alexandria, Virginia 22313

Sir:

Real Party In Interest

The real party in interest is Motorola Inc., by virtue of an assignment duly executed by the named inventor(s) and recorded in the Patent Office on 28 February 2002, REEL/FRAME: 012659/0525.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of Claims

Claims 10, 14-18, 21-22 and 24-26 are pending and stand finally rejected in the Office Action mailed on 14 June 2004.

Claims 10, 14-18, 21-22 and 24-26 are the subject of the instant appeal and are appended hereto.

Status of Amendments

No amendments have been filed subsequent to the mailing of the final Office Action on 14 June 2004.

Summary of Disclosure

The instant disclosure is drawn generally to electronic devices, for example, cellular telephones, wireless communications handsets, and other portable electronics devices, comprising housings having a variable appearance portion, for example, an electrochromic material, that changes appearance in response to user variable outputs of a control circuit. The disclosure is also drawn to methods in wireless communications handsets having an outer housing with a variable input responsive variable appearance property portion that is variable in response to a user variable input applied to the wireless communication handset. These and other aspects of the invention are claimed and disclosed more fully in the instant specification on page 1, line 10 to page 13, line 10 in conjunction with FIGSs. 1-7.

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Issues for Consideration on Appeal

1. Whether Claims 10, 14-18, 21, 22 and 24-are patentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U.S. Patent No. 6,626,216 (Lin) under 35 USC 103(a).

2. Whether Claim 14 is patentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin) and U.S. Publication 2002/0075135 (Bown) under 35 USC 103(a).

3. Whether Claims 15-16, 22 and 24 are patentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin), U.S. Publication 2002/0075135 (Bown) and U.S. Patent No. 5,849,046 (Bailey).

4. Whether Claims 17-18 and 25-26 are patentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin), U.S. Publication 2002/0075135 (Bown), U.S. Patent No. 5,849,046 (Bailey) and the IDS Web Article under 35 USC 103(a).

Grouping of Claims

Claims 10, 14-18, 21-22 and 24-26 do not stand or fall together. The bases for patentability of the appealed claims is discussed fully below.

Discussion of Issue 1; Allowability of Claims Over Lehtiniemi & Lin

Rejection Summary

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Claims 10, 14-18, 21, 22 & 24-26 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin). Office Action, 20 January 2004, para. 2.

The Examiner concedes that Lehtiniemi "... fails to teach of a control circuit having a user variable output that coupled [sic] to and that makes change appearance of the variable input responsive variable appearance portion". The Examiner alleges however that it would have been obvious

> ... to have the control circuit, as taught by Lin, in the device of Lehtiniemi so that the color or shade of the electrochromic medium can be progressively changed by a user between a clear and a maximum desired color or shade (col. 8, lines 65-67).

Allowability of Claim 10

Regarding Claim 10, contrary to the Examiner's assertion, Lehtiniemi and Lin fail to disclose or suggest an

> ... electronic device, comprising:
> electrical hardware;
> a housing disposed about at least a portion of the electrical hardware,
> at least a portion of the housing comprising a variable input responsive variable appearance portion,
> a control circuit having a user variable output coupled to the variable input responsive variable appearance portion of the housing,
> whereby the variable input responsive variable appearance portion of the housing changes appearance in response to the user variable output of the control circuit.

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Lehtiniemi discloses a cell phone housing including a thermochromic material that changes color with changing internal or ambient temperature. The disclosure of security window systems in Lin is outside the scope and content of the prior art under 35 U.S.C. 103. See the "Field of the Invention" and claims of Lin. Therefore Lin is not in the same field as the present invention, namely, handheld electronics devices and wireless communications handsets. Lin is also not reasonably pertinent to the particular problem with which the instant applicant was concerned. The concern of Lin is to provide a security window system capable of darkening and detecting breakage. In contrast, the instant application is concerned with providing electronic devices including cellular telephone handsets that may be personalized and differentiated aesthetically by changing the appearance of the housing. See the "Background of the Inventions" in the instant specification. One of ordinary skill in the art would not look to the window security arts to address and resolve issues related to electronics housings. Thus knowledge of window security arts disclosure by Lin should not be imputed to those of ordinary skill in the art pertaining to the claimed inventions.

Aside from whether Lin is within the scope and content of the prior art, there is no suggestion in either Lehtiniemi or Lin to combine and/or modify as asserted by the Examiner. The disclosure of an electrochromic window security system in Lin suggests nothing about using an electrochromic material in the electronic device housing of Lehtiniemi or about using a control circuit to control the appearance of such housing. Lehtiniemi teaches changing a thermochromic material as a function of ambient temperature in the absence of any control circuit. The ambient temperature that affects the thermochromic

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material of Lehtiniemi is also beyond the control of the user. Lin discloses controlling the electrochromic material for purposes, i.e., security and shading, other than changing housing appearance. Thus there is no reason to replace the thermochromic material of Lehtiniemi with the electrochromic material of Lin and to use a "... control circuit as taught by Lin, in the device of Lehtiniemi so that the color or shade of the electrochromic medium can be progressively changed by a user between a clear and a maximum desired color or shade" as suggested by the Examiner in the Office Action of 14 June 2004, para. 2. The Examiner's putative combination appears motivated only by hindsight, which is improper. Claim 10 and the claims that depend therefrom are thus patentably distinguished over Lehtiniemi and Lin.

Allowability of Claim 21

Regarding Claim 21, contrary to the Examiner's assertion, Lehtiniemi and Lin fail to disclose or suggest a

> ... method in a wireless communications handset having an outer housing with a variable input responsive variable appearance property portion, comprising:
> providing a user variable input to the wireless communication handset;
> varying the appearance of the electro-chromic material portion of the housing in response to the user variable input applied to the wireless communication handset.

Lehtiniemi discloses a cell phone housing including a thermochromic material that changes color with changing internal or ambient temperature. The disclosure of security window systems in Lin is outside the

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scope and content of the prior art under 35 U.S.C. 103. See the "Field of the Invention" and claims of Lin. Therefore Lin is not in the same field as the present invention, namely, handheld electronics devices and wireless communications handsets. Lin is also not reasonably pertinent to the particular problem with which the instant applicant was concerned. The concern of Lin is to provide a security window system capable of darkening and detecting breakage. In contrast, the instant application is concerned with providing electronic devices including cellular telephone handsets that may be personalized and differentiated aesthetically by changing the appearance of the housing. See the "Background of the Inventions" in the instant specification. One of ordinary skill in the art would not look to the window security arts to address and resolve issues related to electronics housings. Thus knowledge of window security arts disclosure by Lin should not be imputed to those of ordinary skill in the art pertaining to the claimed inventions.

Aside from whether Lin is within the scope and content of the prior art, there is no suggestion in either Lehtiniemi or Lin to combine and/or modify as asserted by the Examiner. The disclosure in Lin of controlling an electrochromic window security system suggests nothing about providing a user variable input to the wireless communication handset and varying the appearance of an electro-chromic material portion of the handset housing. Lehtiniemi teaches changing a thermochromic material of as a function of ambient temperature in the absence of any control circuit. The ambient temperature that affects the thermochromic material of Lehtiniemi is however beyond the control of the user. Lin discloses controlling the electrochromic material for purposes, i.e., security and shading, other than changing housing

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appearance. Thus there is no reason to replace the thermochromic material of Lehtiniemi with the electrochromic material of Lin and to use a "... control circuit as taught by Lin, in the device of Lehtiniemi so that the color or shade of the electrochromic medium can be progressively changed by a user between a clear and a maximum desired color or shade" as suggested by the Examiner in the Office Action of 14 June 2004, para. 2. The Examiner's putative combination appears motivated only by hindsight, which is improper. Claim 21 and the claims that depend therefrom are thus patentably distinguished over Lehtiniemi and Lin.

Discussion of Issue 2; Allowability of Claims Over Lehtiniemi, Lin & Bown

Rejection Summary

Claim 14 stands rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin) and US 2002/0075135 (Bown). Official Action, 20 January 2004, para. 3. The Examiner relies upon Bown for teaching a light emitting polymer material.

Discussion of Allowability of Claim 14

Regarding Claim 14, contrary to the Examiner's assertion, Stein fails to disclose or suggest, in combination with the limitations of Claim 10 and any intervening claims,

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... the variable input responsive variable appearance portion of the housing is a light emitting polymer material.

Lehtiniemi discloses a thermochromic material in a cellular telephone housing and Lin discloses electrochromic windowpanes. The deficiencies of Lehtiniemi and Lin were discussed above in connection with the allowability of Claim 10. Bown is merely relied upon for teaching a light-emitting polymer or pigment, which applicant concedes is known generally. Bown however does not make-up for the deficiencies of Lehtiniemi and Lin. Claim 14 is thus further patentably distinguished over Lehtiniemi, Lin and Bown.

Discussion of Issue 3; Allowability of Claims Over Lehtiniemi, Lin, Bown & Bailey

Rejection Summary

Claims 15-16, 22 and 24 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin), US 2002/0075135 (Bown) and U.S. 5,849,046 (Bailey). Official Action, 20 January 2004, para. 2 (second occurrence).

The Examiner relies upon Bailey for teaching an electrochromic material and control circuit, which is not disclosed by the several other primary and secondary references.

Discussion of Allowability of Claim 15

Contrary to the Examiner's assertion, the prior art fails to disclose or suggest, in combination with the limitations of Claim 10 and any intervening claims,

> ... the variable input responsive variable appearance portion of the housing is an electro-chromic material, the control circuit having a variable voltage output coupled across the electro-chromic material.

Bailey discloses an electrochromic material used to indicate the charge on a battery. There is no suggestion to use the thermochromic voltage detector in Bailey as a variable appearance housing portion as in Claim 15. Also, the voltage detector of Bailey does not have a user variable output, since it merely detects whatever charge remains on the battery. Claim 15 is thus further patentably distinguished over Lehtiniemi, Lin, Bown and Bailey.

Discussion of Allowability of Claim 16

Regarding Claim 16, contrary to the Examiner's assertion, the prior art fails to disclose or suggest, in combination with the limitaitosn of Claim 15, that "... the electro-chromic material is an electro-chromic polymer." Claim 16 is thus further patentably distinguished over Lehtiniemi, Lin, Bown and Bailey. Claim 16 is allowable for at least the same reasons as discussed above in connection with the allowability of Claims 14 and 16.

Discussion of Allowability of Claim 22

Regarding Claim 22, the prior art fails to disclose or suggest in combination with the limitations of Claim 21,

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> ... providing the user variable input by selecting a voltage applied by an electrical control circuit having a variable voltage output coupled to an electro-chromic portion of the housing.

The other prior art references fail to disclose a control circuit for providing a user variable input. The variable voltage output on the battery of Bailey is not an electrical control circuit. Claim 22 is thus further patentably distinguished over Lehtiniemi, Bown and Bailey.

Discussion of Allowability of Claim 24

Regarding Claim 24, the prior art fails to disclose or suggest in combination with the limitations of Claim 21 and any intervening claims "... varying the variable appearance property by changing a color of the electro-chromic portion of the housing in response to a variable voltage applied thereto." Claim 24 is thus further patentably distinguished over Lehtiniemi, Lin, Bown and Bailey.

Discussion of Issue 4; Allowability of Claims Over Lehtiniemi, Lin, Bown, Bailey & IDS Web Article

Rejection Summary

Claims 17-18 and 25-26 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,466,299 (Lehtiniemi) in view of U. S. Patent No. 6,626,216 (Lin), US 2002/0075135 (Bown), U.S. 5,849,046 (Bailey) and the IDS Web Article. Official Action, 20 January 2004, para. 3 (second occurrence).

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The Examiner relies upon the IDS Web Article for teaching an "... anodically coloring polymer and a cathodically coloring layer separated by a solid-state get electrolyte layer", which is not disclosed by the several other primary and secondary references.

Discussion of Allowability of Claim 17

Regarding Claim 17, contrary to the Examiner's assertion, the prior art fails to disclose or suggest, in combination with the limitations of Claim 10 and any intervening claims,

> ... the electro-chromic material includes an anodically coloring polymer layer and a cathodically coloring layer separated by a solid-state gel electrolyte layer, the anodically and cathodically coloring layers disposed between first and second transparent conducting layers.

The mere existence of the subject material does not render it obvious to use the material in other applications. Moreover, the Examiner has not cited any reason or rationale supporting the putative combination/modification. The dubious rejection is overshadowed by suggestions of hindsight reconstruction, a practice admonished repeatedly by the Board of Patent Appeals and Interferences. Claim 17 is further patentably distinguished over the prior art.

Discussion of Allowability of Claim 18

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Regarding Claim 18, contrary to the Examiner's assertion, Stein fails to disclose or suggest, in combination with the limitations of Claim 10 and any intervening claims,

> ... the electro-chromic material includes first and second transparent insulating layers, the first and second transparent conducting layers disposed between the first and second insulating layers.

The mere existence of the subject material does not render it obvious to use the material in other applications. Moreover, the Examiner has not cited any reason or rationale supporting the putative combination/modification. The dubious rejection is overshadowed by suggestions of hindsight reconstruction, a practice admonished repeatedly by the Board of Patent Appeals and Interferences. Claim 18 is thus further patentably distinguished over the art.

Discussion of Allowability of Claim 25

Regarding Claim 25, the prior art fails to disclose or suggest, in combination with the limitations of Claim 10 and any intervening claims,

> ... the electro-chromic material includes an anodically coloring polymer layer and a cathodically coloring layer separated by a solid-state gel electrolyte layer, the anodically and cathodically coloring layers disposed between first and second transparent conducting layers.

The mere existence of the subject material does not render it obvious to use the material in other applications. Moreover, the Examiner has not cited any

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reason or rationale supporting the putative combination/modification. The dubious rejection is overshadowed by suggestions of hindsight reconstruction, a practice admonished repeatedly by the Board of Patent Appeals and Interferences. Claim 25 is thus further patentably distinguished over the art.

Discussion of Allowability of Claim 26

Regarding Claim 26, the prior art fails to disclose or suggest in combination with the limitations of Claim 17

> ... the control circuit having a first output coupled to the first transparent conducting layer, the control circuit having a second output coupled to the second transparent conducting layer by a variable resistance element.

The mere existence of the subject material does not render it obvious to use the material in other applications. Moreover, the Examiner has not cited any reason or rationale supporting the putative combination/modification. The dubious rejection is overshadowed by suggestions of hindsight reconstruction, a practice admonished repeatedly by the Board of Patent Appeals and Interferences. Claim 26 is thus further patentably distinguished over the art.

Prayer For Relief

Kindly reverse and vacate the rejections of claims, in view of the discussion above, with instructions for the Examiner to allow said Claims to issue in a United States Patent without further delay.

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MARTINEZ
"Cellular Communications Handsets Having Variable Appearance Housings And Methods Therefor"
Atty. Docket No. CS10862

Appl. No. 10/084,965
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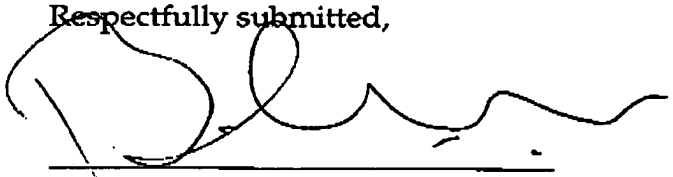
Examiner R. Osorio
Art Unit 2673

Respectfully submitted,



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Claims On Appeal

Claims 1-9 (Canceled).

10. (Previously Presented) An electronic device, comprising:

electrical hardware;

a housing disposed about at least a portion of the electrical hardware,

at least a portion of the housing comprising a variable input responsive variable appearance portion,

a control circuit having a user variable output coupled to the variable input responsive variable appearance portion of the housing,

whereby the variable input responsive variable appearance portion of the housing changes appearance in response to the user variable output of the control circuit.

Claims 11-13 (Canceled).

14. (Original) The electronic device of Claim 10, the variable input responsive variable appearance portion of the housing is a light emitting polymer material.

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15. (Previously Presented) The electronic device of Claim 10, the variable input responsive variable appearance portion of the housing is an electro-chromic material, the control circuit having a variable voltage output coupled across the electro-chromic material.

16. (Original) The electronic device of Claim 15, the electro-chromic material is an electro-chromic polymer.

17. (Previously Presented) The electronic device of Claim 15, the electro-chromic material includes an anodically coloring polymer layer and a cathodically coloring layer separated by a solid-state gel electrolyte layer, the anodically and cathodically coloring layers disposed between first and second transparent conducting layers.

18. (Previously Presented) The electronic device of Claim 17, the electro-chromic material includes first and second transparent insulating layers, the first and second transparent conducting layers disposed between the first and second insulating layers.

Claims 19-20 (Canceled).

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21. (Original) A method in a wireless communications handset having an outer housing with a variable input responsive variable appearance property portion, comprising:

providing a user variable input to the wireless communication handset;

varying a variable appearance property of the variable input responsive variable appearance property portion of the housing in response to the user variable input applied to the wireless communication handset.

22. (Previously Presented) The method of Claim 21, providing the user variable input by selecting a voltage applied by an electrical control circuit having a variable voltage output coupled to an electro-chromic portion of the housing.

Claim 23. (Canceled)

24. (Previously Presented) The method of Claim 21, varying the variable appearance property by changing a color of the electro-chromic portion of the housing in response to a variable voltage applied thereto.

25. (Previously Presented) The electronic device of Claim 10, the electro-chromic material includes an anodically coloring polymer layer and a

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cathodically coloring layer separated by a solid-state gel electrolyte layer, the anodically and cathodically coloring layers disposed between first and second transparent conducting layers.

26. (Previously Presented) The electronic device of Claim 17, the control circuit having a first output coupled to the first transparent conducting layer, the control circuit having a second output coupled to the second transparent conducting layer by a variable resistance element.

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